

Dear Kirby Lake Management District Member,

The Aquatic Plant Management (APM) Plan for Kirby Lake is near completion. It takes into account that the majority of property owners on the lake believe that the level of aquatic plant growth in the system has and still is increasing in distribution and density. Fortunately this increase in vegetation is not driven by the introduction of a non-native, invasive plant species like Eurasian water milfoil or curly-leaf pondweed. Unfortunately, this makes management to provide relief more difficult, as in general, large-scale management of native plants is not something the WDNR readily supports. Aquatic plants play an important role in lakes. They anchor sediments, buffer wave action, oxygenate water, use up available nutrients before algae can, and provide valuable habitat for fish and aquatic animals. They also help buffer the system from invasion by non-native aquatic invasive plant species. For these reasons and more, managing aquatic plants to provide nuisance and navigation relief, without causing undesirable changes is the main goal of management in Kirby Lake.

Aquatic plants can be managed by physical removal, application of herbicides, mechanical cutting or harvesting, and by manipulating the biological make up of the system. With physical removal aquatic plants are either raked or pulled from the lake by people power. Under certain guidelines this type of plant management does not require a WDNR permit or have high implementation costs, and is most protective of the existing lake conditions. Mechanical harvesting is often completed by a large floating weed cutting and removal machine. It is more large-scale than physical removal and very flexible, providing immediate and targeted relief with limited impacts to the existing lake conditions. It requires a WDNR permit and implementation costs run about \$400-600 per acre for contracted services. To purchase a new harvester, the costs may range from \$45,000 to \$65,000.

Chemical herbicides are also effective at managing aquatic plants, but their use incurs greater scrutiny by the WDNR (particularly when chemically treating native plants), is not as immediate or flexible, requires pre and post treatment follow-up, a WDNR permit, and is just as expensive to implement as mechanical harvesting. Biological manipulation requires changing the existing makeup of the natural environment by adding something new, and is most commonly used to manage invasive species in lakes. Current conditions in Kirby Lake do not warrant its consideration.

The APM Plan recommends that the Kirby Lake Management District implement aquatic plant harvesting either by purchasing (with WDNR grant support) and operating its own equipment or by contracting harvesting services. Herbicide application as a long-term management strategy is not being recommended. It may however, be possible to complete an interim herbicide application in 2013, while harvesting details are being completed. Please answer the following questions related to the aquatic plant harvesting recommendation. Your input is wanted.

1) Would you support aquatic plant harvesting as a means to provide better access and navigation through nuisance growth vegetation?

Yes

No

I need more information

2) If you support harvesting or just need more information, which means of implementation would you most likely support?

Purchase and operation of harvesting equipment

Contracting harvesting services